## PATENT COOPERATION TREATY

## **PCT**

# Translation 10 5000 In INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference H1-106DP3PCT	FOR FURTHER ACTION	SeeNotificationofTransmittalofInternational Preliminary Examination Report (Form PCT/IPEA/416)		
International application No.	International filing date (day/n	nonth/year)	Priority date (day/month/year)	
PCT/JP00/04549	07 July 2000 (07.0°	7.00)	08 July 1999 (08.07.99)	
International Patent Classification (IPC) or national classification and IPC C12N 15/12, 5/10, 1/15, 1/19, 1/21, C12P 21/02, C07K 14/47, 16/18, C12Q 1/02, 1/68				
Applicant	HELIX RESEARCH IN	STITUTE		
<ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> </ol>				
2. This REPORT consists of a total of	5 sheets, including	ng this cover s	heet.	
been amended and are the ba	nied by ANNEXES, i.e., sheets is for this report and/or sheets of the Administrative Instruction	containing rec	iption, claims and/or drawings which have stifications made before this Authority (see CT).	
These annexes consist of a to	otal of sheets.			
3. This report contains indications rela	ating to the following items:		_	
l Basis of the report			,	
II Priority				
III Non-establishment	of opinion with regard to novelt	y, inventive st	ep and industrial applicability	
IV Lack of unity of inv	rention			
Reasoned statement	Barren of attenuant under Article 35(2) with regard to povelty, inventive step or industrial applicability:			
VI Certain documents	cited			
VII Certain defects in the	VII Certain defects in the international application			
VIII Certain observation	VIII Certain observations on the international application			
Date of submission of the demand	Date o	of completion of	of this report	
02 February 2001 (02.	02.01)	20 August 2001 (20.08.2001)		
Name and mailing address of the IPEA/JP	Autho	orized officer		

Telephone No.

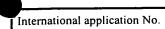
Facsimile No.

International application No.

### PCT/JP00/04549

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I. Ba	isis o	f the report			
1. With regard to the elements of the international application:*					
$\triangleright$	3	the international application as originally filed			
Ī	7	the descripti	ion:		
_		pages		, as originally filed	
		pages		filed with the demand	
		pages	, filed with the letter of		
Γ	٦	the claims:			
_		pages		, as originally filed	
		nages	, as amended (together with any state	ment under Article 19	
		pages	,	med with the demand	
		pages	, filed with the letter of		
۲	٦	the drawing	25:		
_		pages		, as originally filed	
		pages		filed with the demand	
		pages	, filed with the letter of		
Г	٦.,	ne sequence	listing part of the description:		
L	"		nstring part of the desertiphonic	, as originally filed	
		pages		filed with the demand	
		pages	, filed with the letter of		
t ]	he in These	the language the language the language or 55.3).  regard to minary exame contained filed togethe terminished see the remarks of the contained for the contained for the contained for the contained togethe the contained the contained for the contained the	the language, all the elements marked above were available or furnished to this Authority in application was filed, unless otherwise indicated under this item.  Were available or furnished to this Authority in the following language  ge of a translation furnished for the purposes of international search (under Rule 23.1(b)).  Inge of publication of the international application (under Rule 48.3(b)).  Inge of the translation furnished for the purposes of international preliminary examination  any nucleotide and/or amino acid sequence disclosed in the international application into the basis of the sequence listing:  in the international application in written form.  There with the international application in computer readable form.  Subsequently to this Authority in written form.  Subsequently to this Authority in computer readable form.	which is: (under Rule 55.2 and/	
	H		ment that the subsequently furnished written sequence listing does not go beyond	the disclosure in the	
		internation	nal application as filed has been furnished. ment that the information recorded in computer readable form is identical to the writte		
4.		The amen	dments have resulted in the cancellation of:		
	_		e description, pages		
			e claims, Nos.		
			e drawings, sheets/fig		
5.		This renor	thas been established as if (some of) the amendments had not been made, since they have e disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	e been considered to go	
1	in th	acement she nis report a	eets which have been furnished to the receiving Office in response to an invitation under A is "originally filed" and are not annexed to this report since they do not contain at	rticle 14 are referred to mendments (Rule 70.16	
1	and	70.1 <i>7</i> ).	t sheet containing such amendments must be referred to under item $l$ and annexed to this re		



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP00/04549

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
1.	1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:					
		the entire international application.				
	$\boxtimes$	claims Nos				
	becaus	se:				
		the said international application, or the said claims Nos				
	$\boxtimes$	the description, claims or drawings (indicate particular elements below) or said claims Nos. 14,16 are so unclear that no meaningful opinion could be formed (specify):				
	The Examples and the like in the Specification do not disclose any specific compounds that bind to the proteins set forth in Claim 3 or compounds that regulate the incorporation of long-chain fatty acids into the cells expressing the proteins set forth in Claim 3, and there is no description elsewhere concerning what kinds of compounds are included in this group. Therefore, it is completely unclear what kinds of compounds are actually included, and the inventions set forth in the above Claims are not described clearly enough to render a meaningful opinion.					
		the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.				
		by the description that no meaningful opinion could be formed.  no international search report has been established for said claims Nos.				
	<u></u>					
2	2. A me seque	caningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acidence listing to comply with the standard provided for in Annex C of the Administrative Instructions:				
		the written form has not been furnished or does not comply with the standard.				
		the computer readable form has not been furnished or does not comply with the standard.				

International application No.

#### PCT/JP00/04549

#### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

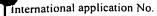
V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1. Statement				
Novelty (N)	Claims	1-13,15	YES	
	Claims		NO	
Inventive step (IS)	Claims	1-13,15	YES	
	Claims		NO NO	
Industrial applicability (IA)	Claims	1-13,15	YES	
	Claims		NO	
			•	

2. Citations and explanations

Document 1: David Hirsch et al., "A family of fatty acid transporters conserved from mycobacterium to man," Proc. Natl. Acad. Sci. USA, Vol. 95, July 1998, pp. 8625-8629

Document 1 describes the identification of a human homologue corresponding to mouse FATP and a novel human homologue No. 6 that is most closely linked with FATP3 by screening the EST database using the FATP1-5 amino acid sequences of the mouse FATP family and using the mouse FATP sequence. Using a fragment of DNA that codes for a previously known protein as a probe and obtaining DNA that codes for other proteins such as a family of proteins that are linked to that protein, i.e., the so-called hybridization technique, is a well known technique to persons skilled in the art. Therefore, preparing a probe based on the mouse FATP1-5 amino acid sequences described in document 1 with the goal of obtaining FATP homologues in humans, screening a human cDNA library using the hybridization technique, and obtaining human homologues belonging to the FATP family is obvious to persons skilled in the art. Therefore, based on the description in document 1 and widely known techniques, the inventions set forth in these Claims are obvious to persons skilled in the art.

Furthermore, this examination finds that the inventions set forth in the above Claims provide no particularly outstanding effect that cannot be predicted from the description in document 1 and widely known techniques.



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

#### PCT/JP00/04549

1.	Certain	published	documents	(Rule	70. I	0)
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Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO,99/46281,A2	16 September 1999 (16.09.1999)	08 March 1999 (08.03.1999)	10 March 1998 (10.03.1998)
[EX]			
WO,99/36537,A2	22 July 1999 (22.07.1999)	14 January 1999 (14.01.1999)	15 January 1998 (15.01.1998)
[EX]			

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure (day/month/year)

Date of written disclosure referring to non-written disclosure (day/month/year)